

Online Appendix

Power-Sharing & Exclusion: Toward a Theory of Herrenvolk Democracy

Jessala A. Grijalva

2026-03-11

Table of contents

A: PSI Component Specification	2
B: Aggregation Method Comparison	3
C: Internal Consistency	4
D: Dimensionality	5
E: Convergent & Discriminant Validity	6
F: Uncertainty Quantification	7
G: Jackknife Sensitivity	8
H: Software and Session Information	9

Table 1

Table A1: Final PSI Components

Component	Variable	Description
Social Group Power	v2pepwsoc	Political power distributed across racial, ethnic, religious groups
Gender Power	v2pepwrgen	Political power distributed between men and women
Civil Liberties Equality	v2clsocgrp	Equal civil liberties across social groups
Freedom from Torture	v2cltort	Freedom from government torture
Freedom from Killings	v2clkill	Freedom from political killings

A: PSI Component Specification

Note. All five components have complete temporal coverage from 1789. Variables selected from V-Dem v15 based on temporal coverage, conceptual fit (low scores during known exclusion), and non-redundancy.

B: Aggregation Method Comparison

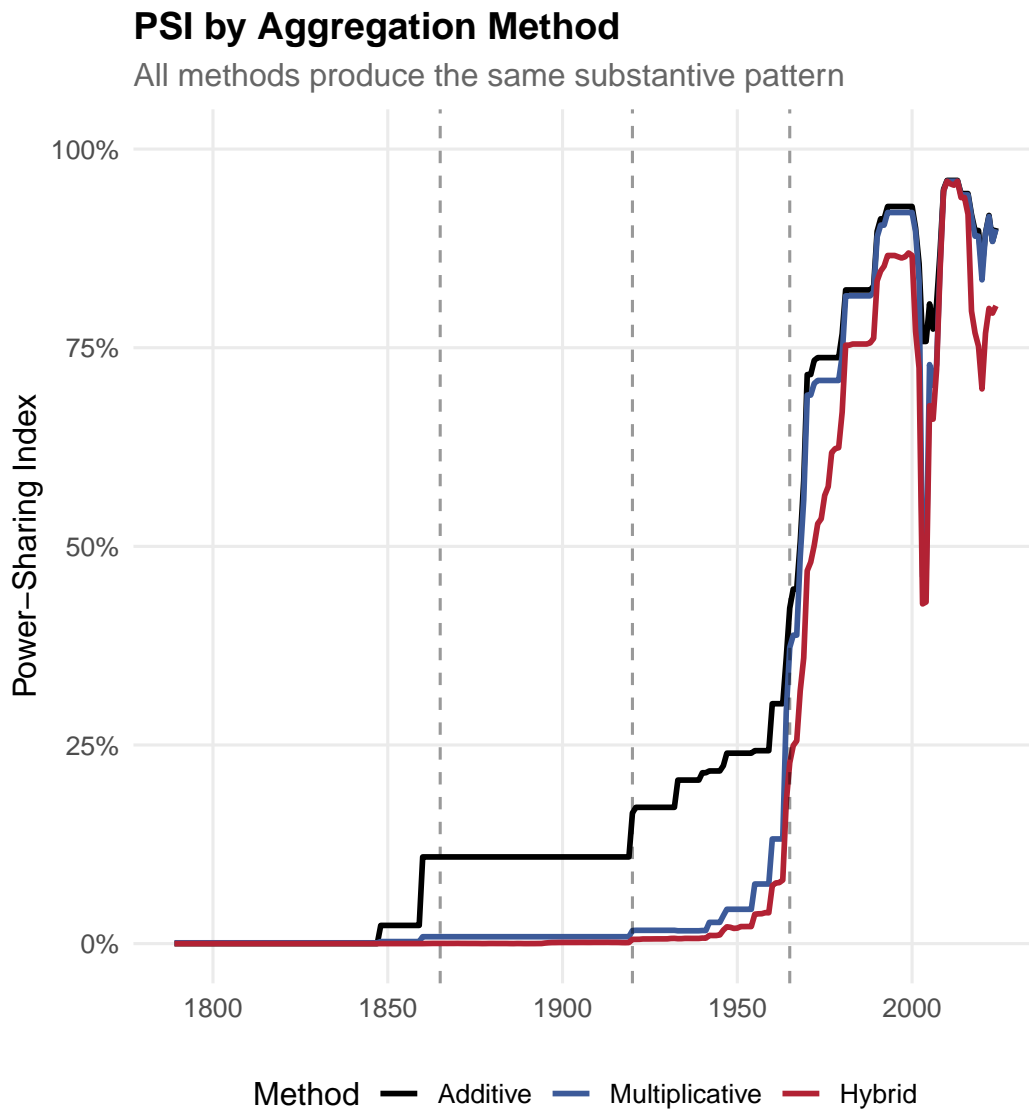


Figure 1: Figure B1: PSI by Aggregation Method

Note. Vertical dashed lines mark the end of the Civil War (1865), women’s suffrage (1920), and the Voting Rights Act (1965). All three methods produce the same substantive periodization; they differ only in magnitude. See Phase 1 for full aggregation sensitivity analysis.

C: Internal Consistency

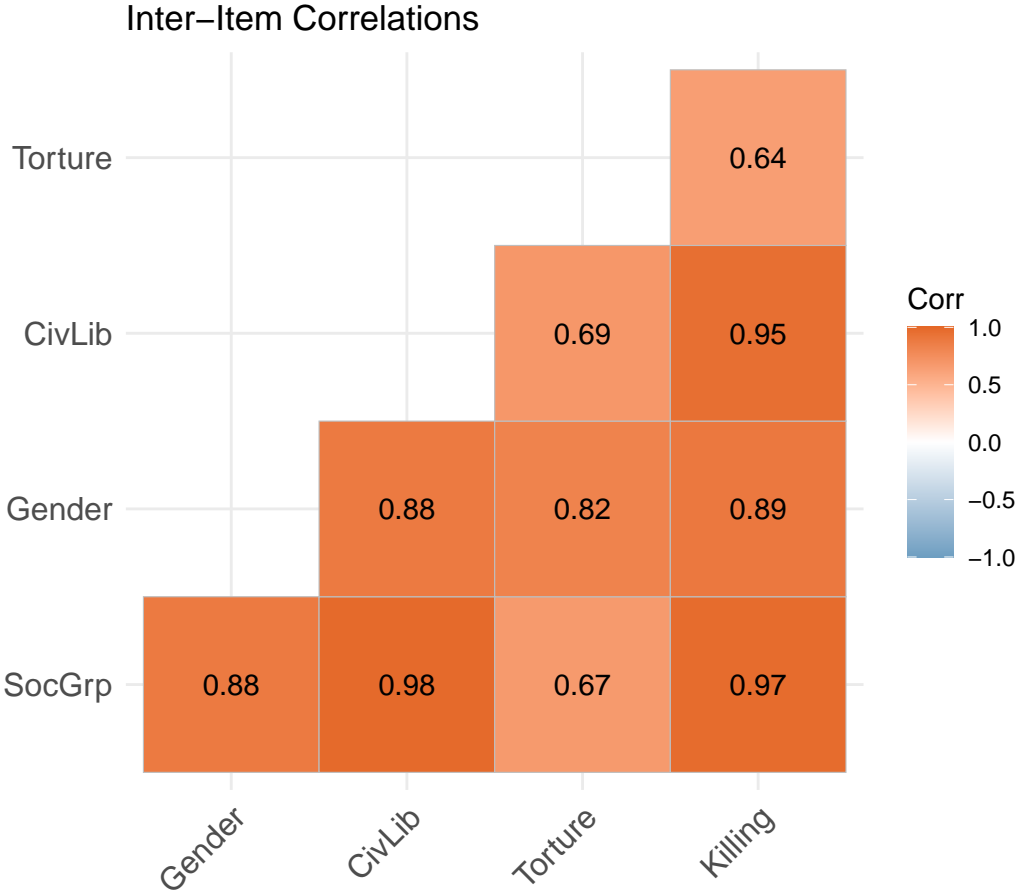


Figure 2: Figure C1: Inter-Item Correlation Matrix

Note. All inter-item correlations exceed 0.60. Cronbach’s $\alpha = 0.96$ (excellent internal consistency).

Note. No component substantially increases α when dropped, confirming that all five belong in the index.

Table 2

Table C1: Alpha if Item Dropped

Component	raw_alpha	std.alpha
Social Group Power	0.943	0.945
Gender Power	0.947	0.947
Civil Liberties Equality	0.945	0.945
Freedom from Torture	0.978	0.980
Freedom from Killings	0.947	0.949

Table 3

Table D1: PCA Variance Explained

PC	Variance Explained (%)	Cumulative (%)
1	87.4	87.4
2	9.6	97.0
3	2.0	99.0
4	0.8	99.8
5	0.2	100.0

D: Dimensionality

Note. PC1 explains 87.4% of variance, confirming unidimensionality. KMO = 0.79 (“meritorious”).

Table 4

Table E1: Era-Specific Correlations

era	N	r(PSI, Electoral)	r(PSI, Liberal)	r(PSI, Participatory)
Herrenvolk Democracy (1789-1865)	76	-0.504	0.196	0.482
Reconstruction (1865-1877)	12	NA	NA	NA
Partial Inclusion (1877-1965)	88	0.933	0.953	0.960
Power-Sharing Dilemma (1965+)	60	0.840	0.845	0.849

E: Convergent & Discriminant Validity

Note. During the Herrenvolk era (1789–1865), PSI shows a negative correlation with Electoral Democracy, confirming discriminant validity. Egalitarian and Deliberative indices excluded (begin 1900).

F: Uncertainty Quantification

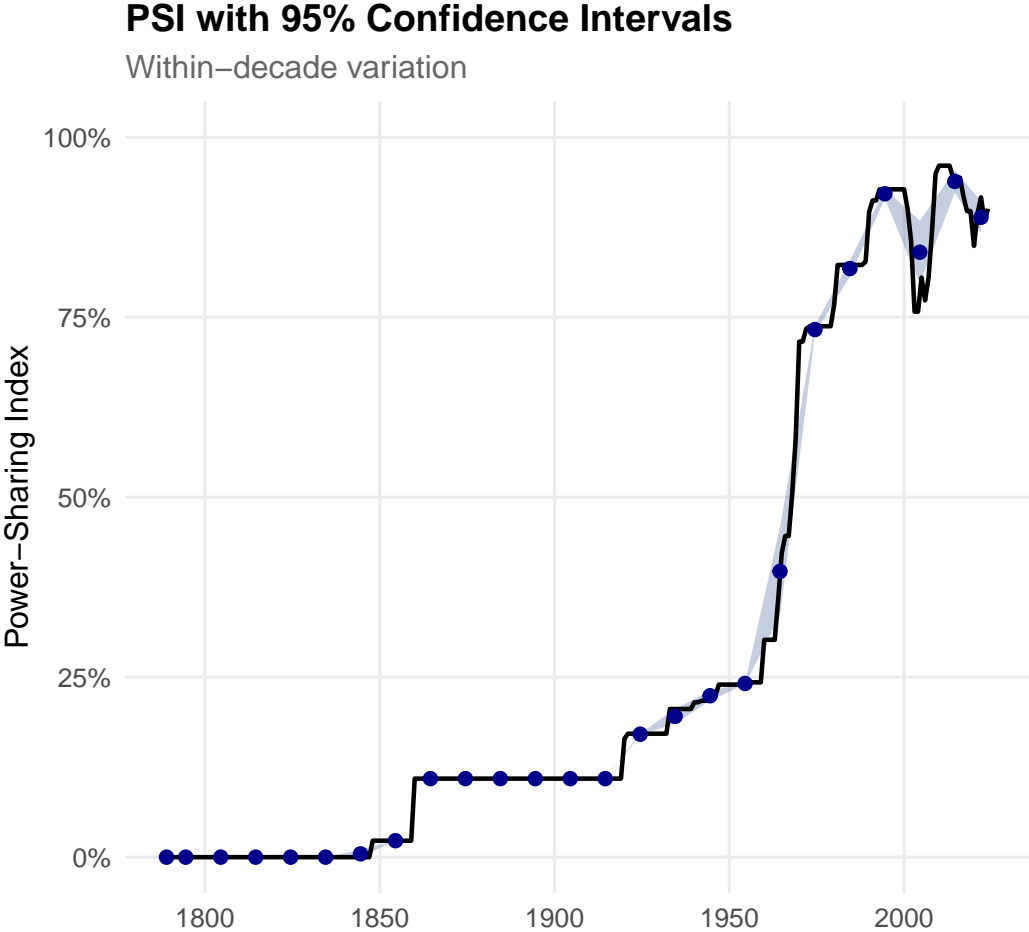


Figure 3: Figure F1: PSI with 95% Confidence Intervals

Note. Blue ribbon shows 95% CIs from within-decade variation. Confidence intervals do not overlap across eras.

G: Jackknife Sensitivity

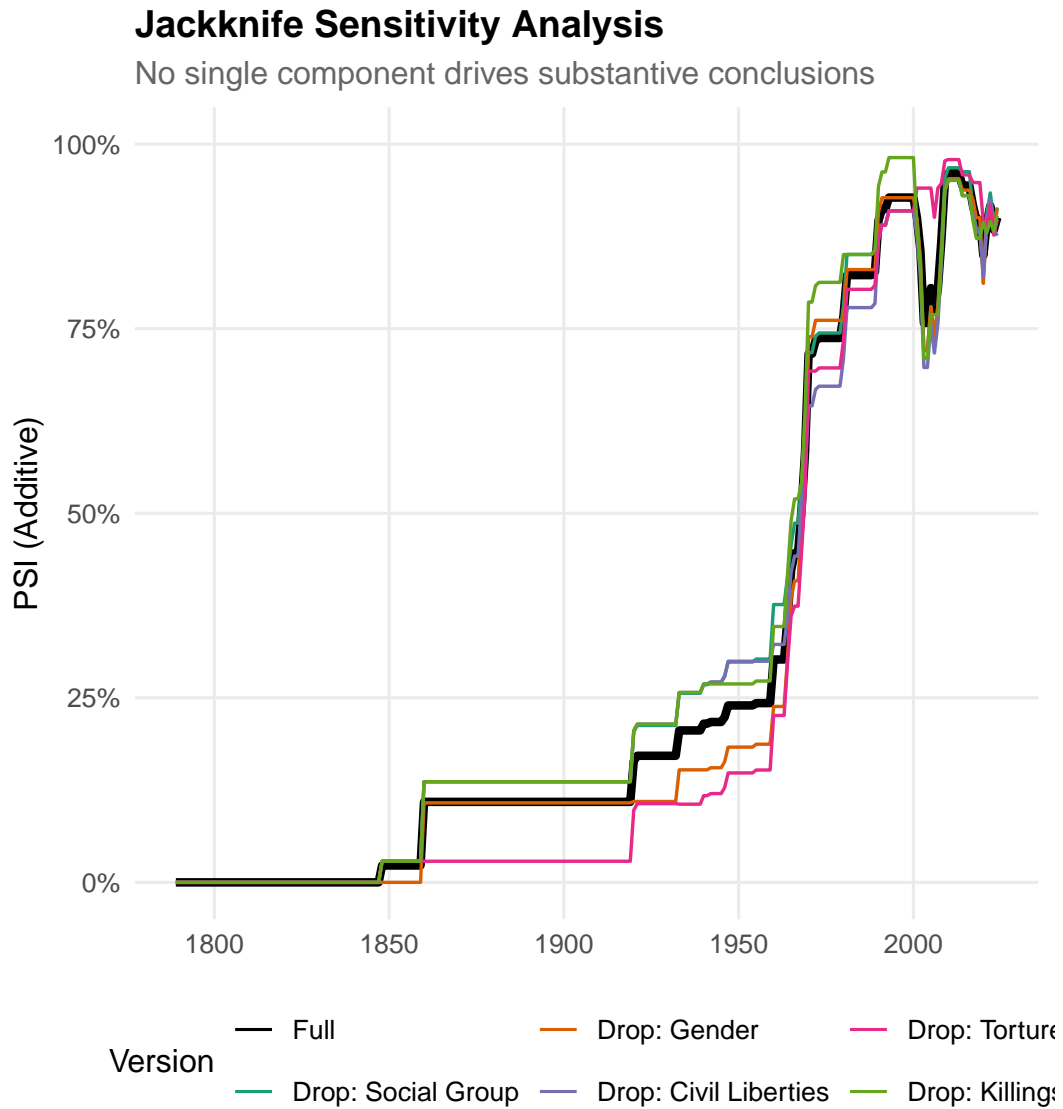


Figure 4: Figure G1: Jackknife Sensitivity Analysis

Note. Black line = full 5-component index. Colored lines = index with each component dropped. No single component changes the substantive pattern.

H: Software and Session Information

R version 4.5.2 (2025-10-31)

Platform: aarch64-apple-darwin20

Running under: macOS Tahoe 26.3

Matrix products: default

BLAS: /System/Library/Frameworks/Accelerate.framework/Versions/A/Frameworks/vecLib.framework

LAPACK: /Library/Frameworks/R.framework/Versions/4.5-arm64/Resources/lib/libRlapack.dylib; LA

locale:

[1] en_US.UTF-8/en_US.UTF-8/en_US.UTF-8/C/en_US.UTF-8/en_US.UTF-8

time zone: America/Indiana/Indianapolis

tzcode source: internal

attached base packages:

[1] stats graphics grDevices utils datasets methods base

other attached packages:

[1] kableExtra_1.4.0	knitr_1.50	ggcorrplot_0.1.4.1	psych_2.5.3
[5] scales_1.4.0	gt_1.1.0	lubridate_1.9.4	forcats_1.0.0
[9] stringr_1.5.1	dplyr_1.1.4	purrr_1.0.4	readr_2.1.5
[13] tidyr_1.3.1	tibble_3.3.0	ggplot2_4.0.2	tidyverse_2.0.0
[17] pacman_0.5.1	here_1.0.1		

loaded via a namespace (and not attached):

[1] generics_0.1.4	xml2_1.3.8	stringi_1.8.7	lattice_0.22-7
[5] hms_1.1.3	digest_0.6.37	magrittr_2.0.3	evaluate_1.0.3
[9] grid_4.5.2	timechange_0.3.0	RColorBrewer_1.1-3	fastmap_1.2.0
[13] plyr_1.8.9	rprojroot_2.0.4	jsonlite_2.0.0	tinytex_0.57
[17] viridisLite_0.4.3	textshaping_1.0.1	mnormt_2.1.1	cli_3.6.5
[21] rlang_1.1.7	withr_3.0.2	yaml_2.3.10	tools_4.5.2
[25] parallel_4.5.2	reshape2_1.4.4	tzdb_0.5.0	vctrs_0.7.1
[29] R6_2.6.1	lifecycle_1.0.5	fs_1.6.6	pkgconfig_2.0.3
[33] pillar_1.10.2	gtable_0.3.6	Rcpp_1.1.1	glue_1.8.0
[37] systemfonts_1.2.3	xfun_0.54	tidyselect_1.2.1	rstudioapi_0.17.1
[41] farver_2.1.2	htmltools_0.5.8.1	nlme_3.1-168	labeling_0.4.3
[45] svglite_2.2.1	rmarkdown_2.29	compiler_4.5.2	S7_0.2.1